SEQUENCE LISTING

<110> Pyle, Ruth A.
      Xu, Jiangchun

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
  AND DIAGNOSIS OF PANCREATIC CANCER

<130> 210121.543

<140> US
<141> 2001-07-30

<160> 32

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 888
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 663, 668, 743, 748, 749, 784, 786, 803, 820, 823, 832, 862,
878
<223> n = A,T,C or G

<400> 1
ggctaaaata aaggacacaa aatttgagtt ttaaacaggg tttcctacac tttttgttat 60
tctgcagtct aaaagtatac aattccttta ttttagcctt accactcaaa gtttatttgt 120
aattctttat actttaaaaa ctataaatat atttgaggat cagcacagta atgcccaaca 180
atattgtttt taaacaaaaa atgtaaacat tcaaaagaat ctctctaaat cactgattaa 240
atcatttgac tgaaaacaag cttccttctc tattatttgt tactgagtca ttcaccttta 300
ttatacaggt atatttatga atattatatc aaaatagcta catcatttgg cttcataata 360
ggaataaaga cttacctaaa atggttgaca acattcatct ggctaagaaa tgaaagtaca 420
aaggaccctg gcctccgatc actctctctt ataagataac tgccagactt ccctgcctgc 480
ctgaggcgtt cttctgctat cgttctgtca agttttccgt gataccacct aagggaaaaa 540
cagagaagat attacaatat aaatagcaag tgcagaattt ctatggacac ttgaaaaaca 600
tactactaga gggtttaaat gcctacatgt aacttaaaca tttacatttt actctgaacc 660
agntattnca attttaactc aatttacctc agtctcaaaa aaaactcatt tacttgggct 720
ttaatttggt ctaaaagctc agncctannc atctcatata taaaactctt ccttttacc 780
catntnctac ttcaggatgg cgntttcaaa ataacctcgn acncacttct tnaaataaag 840
atgccatggg ggtattctcc cncttttgga ccgatccngg gcgggcct   888

<210> 2
<211> 1118
<212> DNA
<213> Homo sapiens

<220>

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<221> misc_feature
<222> 44, 76, 81, 139, 141, 369, 374, 422, 425, 482, 551, 557,
562, 604, 612, 623, 673, 685, 699, 700, 707, 709, 720, 726,
727, 745, 762, 766, 767, 784, 793, 803, 814, 819, 832, 834,
847, 851, 865, 867, 868, 884, 889, 899, 901, 902, 903
<223> n = A,T,C or G

<221> misc_feature
<222> 904, 905, 909, 911, 912, 921, 950, 973, 986, 992, 993, 997,
1007, 1008, 1011, 1012, 1014, 1017, 1018, 1023, 1024, 1031,
1032, 1033, 1035, 1054, 1055, 1062, 1063, 1065, 1080, 1083
<223> n = A,T,C or G

<400> 2
gttttttttt tttttttttt tttcatcgga aaatagttta attntgtaca gacaaccacg 60
ggactgatta caaagngcgg ngcaaacacc agggcccatg agcgccagca gcgtggccca 120
ccacgtgccg gggctccana naccacgccc gaaacaccaa ataaatcaca gacgtgacaa 180
ttgcgggagg agcatgaatc agctgttcct tcgggaggag aaaaaggaaa caacaatcag 240
aggctttgga atgctttctc ttcatgtgcc tggaacgctg ggcgggcggt gacccggggc 300
tcggagcccc accctggcca cacctgctgt cgcccacggg gtcctcacgg tggggaccca 360
ggtcccacna cggntcccaa cctgtggagc tgtgtgcgca gccaccacca ctgcggcctc 420
anaanagggg ccgggagccc tggttctcaa actccgacca ggcgtcattc agctccatga 480
anatcatctt ggcgtgctgc tcgtacgggt gccccgcacc ttgtcgqggt gcacggccag 540
caccgggcgg ngatagngct tnttccttgc tccggacccc aggtcggcca ttcccacggg 600
cgtncagggg gnttttcccc gtnccaaaaa aactgtgttg caacggggga caagcaaggg 660
ccccgggatg ttncccttcc tttgnccttc aattcccann cccaggnanc cttttaaacn 720
tttgannggg ggggcccccg ggttnttttt aaacccaagg gncccnnggg ttttccccc 780
aaantttttg ggnaaaaggg ggnctttttt gggncccnt tttttttttt tnanaaaacc 840
ttgggganggg naaaaaaccc ctttntnntt ggggaacaaa ccanaaaant ttttaaaang 900
nnnnntttnt nnaaaaaaaa nttttggggt ttttgaaac aaaaaaattn ggggggggg 960
gggaaacccc ccnttttttt ttgggnccccg gnnaaantt aaatttnngg nnanttnngc 1020
ttnnttttc nnncnttttg gggggtttt tttnnggggg gnnanaaaac ccctcctttn 1080
ggncttttt ttaaaaaatt ttttttttgg gggggct 1118

<210> 3
<211> 974
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 553, 592, 630, 656, 684, 686, 739, 770, 794, 807, 814, 821,
841, 849, 861, 876, 892, 924, 956, 963
<223> n = A,T,C or G

<400> 3
gcgaggcttc agtgagccag gatggaaacg cgtgtcccaa gtgtctggac accgccgccg 60
ccactgcgac ctagcgccgc cgccgccggg gcccaatgcc ggtcatgccc attccgcggc 120
gggtgcgctc cttccacggc ccgcacacca cctgcctgca tgcggcctgc gggcccgtgc 180
gcgcctccca cctggcccgc accaagtaca caacttcga cgtgtacatc aagacgcgct 240
ggctgtacgg cttcatccgc ttcctactct actttagctg cagcctgttc actgcggcgc 300
tctggggtgc gctggccgcc ctcttctgcc tacagtacct gggcgttcgc gtcctgctgc 360
gcttccagcg caagctgtcg gtgctgctgc tgctgctggg ccgccggcgc gtggacttcc 420
gcctggtgaa cgagctgctc gtctatggca tccacgtcac cagcagcatc ttaaaagccc 480
```

```
caggtatatg ctgagatctt atctcacgct gtcctccagt gtctggggggg cccaaatgat 540
ggcacagggg cangtgggct ggaagggcgc aaaatgcctg tgtttaaggg anggtggcca 600
ccatgggggcc cgagggtctt acccaagaan cccttggctt ttggttcctt aaaccnttgc 660
aagtcaaccg gggaagcaac ttantnggggg gggacctggg cccaattggg cccgtggtgg 720
aactttttttg gggggggccna aaattggggg aaagggggccc ccccccttggn aaataaaatg 780
gaaattgggc caangggaac aaaccanggg caanaaaggg nttacccccct taaaaaacca 840
ngggaaccnc caggggggggg nggggggacct tggacnaacc ccctaatggg gnacccctcc 900
aaaatccatg gttccccccc cctnttgggg attgggggggg gaattttttga ccctanccctt 960
ttnggggggaa caaa                                               974
```

<210> 4
<211> 865
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 549, 567, 606, 668, 671, 687, 703, 732, 763, 777, 790, 799,
807, 847, 861
<223> n = A,T,C or G

<400> 4

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gctcaccggt gagacctgga agcgggcgag tctcgtgctg tgtcggacct gcagcccctg 60
gccttccgcc accatggagt acctcatcgg tatccaaggc cccgactatg ttcttgtcgc 120
ctccgaccgg gtggccgcca gcaatattgt ccagatgaag gacgatcatg acaagatgtt 180
taagatgagt gaaaagatat tactcctgtg tgttggagag gctggagaca ctgtacagtt 240
tgcagaatat attcagaaaa acgtgcaact ttataagatg cgaaatggat atgaattgtc 300
tcccacggca gcagctaact tcacacgccg aaacctgctg actgtcttcg gagtcggacc 360
ccatatcatg tgaacctcct cctggctggc tatgatgagc atgaagggcc agcgctgtat 420
tacatggact acctgcagcc ttggccaagg ccccttttgc agcccacggc tatggtgcct 480
tcctgactct cagtatcctc gaccgatact acacacccga ctatctcacg tgagaaggca 540
gtggaactnc ttaggaaatg tctggangaa ctccagaaac gcttcatcct gaatcttgcc 600
accttnagtg ttcgaatcat tgacaaaaat ggcattcatg acctggataa catttccttt 660
ccaaacangg nttctaacat tattgtnctc ccttcccctt tgncagggaa ctttttttt 720
gaaggggctc cnttatttt tttctactct tttcaaggcg ccncttttttg ataaaanggg 780
ttaatttcan aaaaaaaang gggactnttg ggatattaat ttgaaaaaaa aaaaaaaaa 840
aaagggnggg ccgcttttaa ntttt                                      865
```

<210> 5
<211> 731
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 513, 520, 537, 561, 620, 627, 663, 715, 717
<223> n = A,T,C or G

<400> 5
```
gtgaagttct ttctgttgct tttcaccatt gggttctgct gggctcagta ttccccaaat 60
acacaacaag gacggacatc tattgttcat ctgtttgaat ggcgatgggt tgatattgct 120
cttgaatgtg agcgatattt agctccgaag ggatttggag gggttcaggt ctctccacca 180
aatgaaaatg ttgcaattta caacccttc agaccttggt gggaaagata ccaaccagtt 240
agctataaat tatgcacaag atctggaaat gaagatgaat ttagaaacat ggtgactaga 300
```

```
tgtaacaatg ttggggttcg tatttatgtg gatgctgtaa ttaatcatat gtgtggtaac 360
gctgtgagtg caggaacaag cagtacctgt ggaagttact tcaaccctgg aagtagggac 420
tttccagcag tcccatattc tggatgggat ttcaatgatg gtaaatgtaa aactggaagt 480
ggagatatcg agaactacaa tgatgctact cangtcagan aatgtcgtct gactggnctt 540
cttgatcttg cactggagaa ngaatacctg ccgtctaaga atgccgaata tatgaaccat 600
ctcattgcat tggtgtgcan gggtcanctt gatgctttca acccatgtgg gctggaacat 660
aangcaattt ggacaactgc ataatctaac aatactggtt cctgcaggaa gtaancnttc 720
tttcccagaa g                                                    731
```

```
<210> 6
<211> 848
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 522, 537, 547, 596, 622, 682, 704, 708, 747, 755, 775, 828,
848
<223> n = A,T,C or G

<400> 6
ggtcaaaggc ttggcccgtt gccttttcct tcccggcaat actcggttca attaggtctt 60
gtccctcat tatctgtgag gactgaattc cacccccgct tttcaacgca ggctctttgc 120
tcgggaaaag tcaaaccatc tctcaaagga tcaaagagct cagccataga cagagccgcc 180
ggaggaaagc ggagtcgctg catcagatga aaggggcccc tcagcctcac tcctcaccgc 240
agctcctggg atcttaaaga cagggtcagg aggatcagga gggacaagag ggatggaggc 300
gaaaggctgg atccttaatc caggccggag acaaagccgc gccagggagc tcgcggcgcg 360
cggcccctgt cctccggccc gagatgaatc ctgcggcaga agccgagttc aacatcctcc 420
tgccaccgac tcctacaagg ttactcacta taaacaatat ccacccaaca caagcaaagt 480
ttattcctac tttgaatgcc gtgaaaagaa gacagaaaac tncaaattaa ggaaggngaa 540
atatgangaa acagtatttt atgggttgca gtacattctt aataagtact taaaanggaa 600
agtagtaacc aaagagaaaa tncaggaagc ccaagatgtc tacaaagaac attttccaag 660
atgatgtctt ttaatggaaa anggatggaa ctacattctt tganacanta ttgaatgggg 720
gatttttcc aatacaaaaa aaaaaanctt ggttncttga agggggtttt ggtanttttt 780
ccaaaaaggg aaaaaggttt ttttttttc cccggggggg gaaaaaancc cccccccccc 840
ccccgan                                                          848
```

```
<210> 7
<211> 737
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 669, 685, 718, 722
<223> n = A,T,C or G

<400> 7
gcctgtcagg acacagcatg gacatgaggg tccccgctca gctcctgggg ctcctgctgc 60
tctggctccc aggtaccaga tgtgacatcc agatgaccca gtctccatcc tccctgtctg 120
catctgtagg agacagagtc accatcactt gccggcgag tcaggcatt agcaattctt 180
tagcctggta tcagcagaaa ccagggagtg cccctaagct cctactccat gctgtatcca 240
acttggaaag tggggtccca tccaggttca gtggcagtgg atctgggacg gattacactc 300
tcaccatcag cagcctgcag cctgaagatt ttgcaactta ttactgtcaa cagtattata 360
```

```
gtaaccctcc ggtcacttTc ggcggaggga ccaaggtgga gatcaaacga actgtggctg 420
caccatctgt cttcatcttc ccgccatctg atgagcagtt gaaatctgga actgcctctg 480
ttgtgtgcct gctgaataac ttctatccca gagaggccaa agtacagtgg aaggtggata 540
acgccctcca atcgggtaac tcccaggaga gtgtcacaga gcaggacagc aaggacagca 600
cctacagcct cagcagcacc ctgacgctga gcaaagcaga ctacgagaaa caccaagtct 660
acgcctgcna aagtcacccc atcanggcct ggagcttcgc cccgtcacaa aaaagcntt 720
tnaacaaggg gaaaaat                                              737
```

<210> 8
<211> 762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 668, 680, 689, 700, 705, 755, 761
<223> n = A,T,C or G

<400> 8
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ggcgcccgcg cgcgacggcc cggccagcga ggccgcgctg cagctgctgt gccgcgccga 60
cgccggcccg ctctgcgccg cctgccgtat ggctgcgggc cccgagccgc ccgagtggga 120
accgcgctgg aggaaggcgc tgcgcggcaa ggagaacaag gggtctgtgg aaatcatgag 180
aaaggacttg aatgacgccc gggacctgca tggccaggca gagtcagcag ctgcagtgtg 240
gaagggacac gtgatggacc gtaggaagaa ggcactgacc gactacaaga agctgcgggc 300
cttctttgtg gaggaggagg agcatttcct gcaggaggct gagaaggagg aggggctccc 360
tgaggacgag ctggctgacc ccactgagcg gttcaggtca ctgctgcagg cggtctcgga 420
gctggagaag aagcatcgca acctgggcct cagcatgctg ctgcagtgat ggcgccaacc 480
cgtggcagtc ccagagctgg aggcaggagg atggatcctc atctccatgg gaagtgtcag 540
cgtgtggctg cagggaagcg tggcaggcgc ctgccttggg tccatctaca tagttgcgtg 600
tttcaacaat gtccatttat ccttcaccct gaggcgtgtt ttgggggctg caaacacctc 660
cggtagangc tggacctgan gacccttTnc caccttgtgn ccctnccttt cttgaagtcc 720
taaccacaag cccattcttc cattaagtcc ccggnagctt nt                  762
```

<210> 9
<211> 846
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 782, 793, 805
<223> n = A,T,C or G

<400> 9
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accatggact cgggaaccga ggagtacgag ctcaacggcg gcctgcctcc gggcacaccc 60
ggctccccgg acgcctcgcc ggccgctgg ggctggaggc acgggcccat caacgtgaac 120
cattacgcca gcaagaagag cgcagccgag agcatgctgg acatcgcgct gctgatggcc 180
aacgcgtccc agctgaaggc cgtcgtggaa cagggcccca gcttcgcctt ctatgtgccc 240
ctggtggtcc tcatctccat ctcccttgtg ctgcagatcg gcgtggggggt gctgctcatc 300
ttccttgtca agtacgacct taacaacccg gccaagcacg ccaagctgga cttcctcaac 360
aacctggcca cgggcctggt gttcatcatc gtggtagtca acatcttcat cacggccttc 420
ggggtccaga agcccttgat ggacatggca ccccagcagt aaggacaccc aggaccctgg 480
atgctgcctg ccctgcaact cagctgcccg accccaggag tcgccatacc tgtgaggtgt 540
ccacctccct gcacatggca ctacccagac tgccagagcc caggctggcc tcatctgcac 600
```

```
catgtccccg gaccagccct tgctctgact gcggccaagc accacgcagg aggccactct 660
tgtctctcag cagctgttcc caggaagcag cttccttctg gcacatgggg gctgggcaca 720
atagcccaaa agggtcaaaa actgggacaa gcttgcaaaa aactctgtgs cccaaaaaaa 780
angggtctt tgnacccaa ctttnaaggg racccccccca agccagggtc ccccgggga 840
aatggg                                                           846
```

<210> 10
<211> 966
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 20, 100, 102, 103, 640, 698, 705, 747, 768, 772, 778, 779,
793, 811, 815, 830, 838, 844, 853, 854, 855, 862, 869, 870,
871, 872, 873, 883, 897, 907, 914, 946, 949
<223> n = A,T,C or G

<400> 10
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gcagttctct tgctgtcctn cgctccactc tgcagtcccg gtgggcgaag ggtgatgagt 60
aagggaccta gaggggtagg gagttggagc gggggggcgcn tnnttgtttc actgctgcgc 120
ccgtcgcctg ctgacgttta ggtctcccag acctggtggc cgacccctac tacatccagg 180
cgtccacgta cgtgcagaag atgtccatgt acaacctgag atgcgcggcg gaggaaaact 240
gtctggccag tacagcatac agggcagatg tcagagatta tgatcacagg gtgctgctca 300
gatttcccca aagagtgaaa aaccaaggga catcagattt cttacccagc cgaccaagat 360
attcctggga atggcacagt tgtcatcaac attaccacag tatggatgag tttagccact 420
atgacctgct tgatgccaac acccagagga gagtggctga aggccacaaa gcaagtttct 480
gtcttgaaga cacatcctgt gactatggct accacaggcg atttgcatgt actgcacaca 540
cacagggatt gagtcctgct gttatgatac ctatggtgca gacatagact gccagtggat 600
tgatattaca gatgtaaaac ctggaaacta tatcctaaan gtcaagtgta aaccccacta 660
cctggttcct gaatctgact ataccaacca atggtgtngc gcttnggaca ttcgctacca 720
caaggaaaat catgccgtat gcctcangct ggaccaattt cacccgtntt anaaaggnna 780
aaaccaaaac ttncccaatg ggaataaaat naaanggcct tggggggttn tttaaaangg 840
gggnaaaaaa aannnacctt anccttccnn nnngggggaat ttnttttttt tttttgnaaa 900
aaagaanaac cccnaaaaac cccccaaag gaaaattttt tttttnggna ccggttttt 960
aaatta                                                           966
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<210> 11
<211> 852
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 646, 710, 712, 728, 736, 754, 776, 799, 844, 847
<223> n = A,T,C or G

<400> 11
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gacaggattt ccttatttta aagcctgcat agtatttcat catgtacata tactggttgt 60
ttttaaagtg atatggcatt gcctaaaaat aatatggaaa gctttgggca ctatctttat 120
ctctttgcca aatgcccatg tctaatcgag gtttgaggga ataaaacctt gataaactga 180
gaaccgtgaa atgtctttca gggcagaaac tgattttatc aggctccatg tcccaggcac 240
ccagcaggtg ccagagaaat ggtcagctac atgagagtta ccagtttcca ataattcaat 300
acatctaatg gaaggactag ctggagagac agatgcttgc aaacctggca gtggaagcca 360
```

```
tggccctgta cctctgtgcc ttggtgcttt tagaaggcag cgctgtcaga gttcaatggt 420
ataaacttca gtaccttgta aactctactt catgtcagtt ttcaaaaaca tactcaacta 480
aatctcacat gtctacactt atttttcagc taccttccca cattgtgtag tttatcaaaa 540
ttagagaaga gtgaaggagc ttaacattcc aacataattt ttttaatacc gtggcaaaaa 600
cacatagcat aaaatttacc cttaatcatt tctaaacata tagagntcag taagtttaag 660
tatattccat tggtggacaa ccagtatcca aaacttttca tcttgcaaan gngaaactgg 720
atttggtnaa caactnttct tttccccagc catncagcac cactttcttt gggagntttt 780
tccccttaaa atctcatgna agagaactat agattggccc attggaccgg ttatttacaa 840
acanaangtc tc                                                      852


<210> 12
<211> 1090
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> 505, 528, 566, 586, 596, 673, 683, 696, 712, 716, 739, 788,
791, 796, 814, 829, 843, 849, 856, 876, 887, 899, 905, 920,
921, .922, 933, 934, 938, 940, 941, 944, 955, 965, 968, 972,
978, 980, 981, 986, 1000, 1038, 1051, 1066
<223> n = A,T,C or G


<400> 12
gctccctttc tccatctctg tcttgcctca cctctgtccc tgtttctgcc tctatatcct 60
tttttcaata tgtctcttga agctttctgg gaccaagctc taggcagtgc cccggggaat 120
aaggacctat gaaatgcaca ttccacgttc cagaaactcg ctgtcatggg tggggctcaa 180
ggagatggat gcagtatcaa tagggtgtga ttcacgctgc tttggagggg ggcacccagc 240
acagccttga gagggctcgt cacccacatg aaggggtcag ggaaggcttc ctggaggagg 300
gggtgtggga taagatttga aggaacagga ggagttcagc aggcagacag aagaaggttc 360
taggtagagc ggcccagagc tgggagagaa tgattggatt ggatcagcca gtaatggaga 420
agtgactgaa agaaattcag tgggcccgag ggtgctagaa gaatgaggtc ttcttccaaa 480
ggtgggaggg ggcagaccac cacangggtc ttccaacgcc aggcttgngg gggctcagac 540
cttcactttg ggagcactgg gggaanccag aaaaagaact tgtganccaa gggaanggga 600
tagggtcaac tcttagtgga catcaccact tgatggacca ggaaaataaa aaggccaagg 660
gaaggaaggc ttnggccgga aangtccaaa accggnaaag tggagtgccc ancttntcac 720
tttccttaag ggctcttcnt tggcttctta acgggccgtt ggccccttga aaggttcttt 780
tccctggnct nggggncttg ggccttgggg ggcntttcct tgccaaaang gcttgggggg 840
ggnccccnc ccccnttttt ttttcccccc caaaanggcc cggggangtt ccccccttnc 900
aaccnaaatt tttaaacaan nnaatttttt ccnnaagnan ncangtttgg gggcnggcc 960
ttccnttnaa gnccttgncn ngggntnttt ttccttaacn ttcccgcccc gccgggtttt 1020
tcttttttc ccccaaanaa aaaatttttt nggggccggg accccncccc cggggggggg 1080
gggggcaaaa                                                         1090


<210> 13
<211> 841
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> 661, 716, 724, 729, 751, 762, 785, 790, 805, 834
<223> n = A,T,C or G
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<400> 13
gggccgatgc tgcttctaca cggcggggac gttgtccctg ctcctgctgg tgaccagcgt 60
cacgctgctg gtggcccggg tcttccagaa ggctgtagac cagagtatcg agaagaaaat 120
tgtgttaagg aatggtactg aggcatttga ctcctgggag aagccccctc tgcctgtgta 180
tactcagttc tatttcttca atgtcaccaa tccagaggag atcctcagag gggagacccc 240
tcgggtggaa gaagtggggc catacaccta cagggaactc agaaacaaag caaatattca 300
atttggagat aatggaacaa caatatctgc tgttagcaac aaggcctatg tttttgaacg 360
agaccaatct gttggagacc ctaaaattga cttaattaga acattaaata ttcctgtatt 420
gactgtcata gagtggtccc aggtgcactt cctcagggag atcatcgagg ccatgttgaa 480
agcctatcag cagaagctct ttgtgactca cacagttgac gaattgctct ggggctacaa 540
agatgaaatc ttgtccctta tccatgtttt caggcccgat atctctccct attttggcct 600
attctatgag aaaaatggga ctaatgatgg agactatgtt tttctaactg gagaagacag 660
ntaccttaac tttacaaaaa ttgtggaatg gaatgggaaa acgtcctttg actggnggat 720
acanacaant gccatatgaa taatggaaca natggggaat tnttttcccc ccttattacc 780
caaanatgan ggcctttatg tcttnccatt tgaattttgc aggggaaggg gtantacttt 840
c                                                                841
```

<210> 14
<211> 870
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 56, 57, 573, 614, 714, 750, 756, 770, 771, 784, 785, 807,
819, 851, 859
<223> n = A,T,C or G

```
<400> 14
gctcaaagat taagccatgc atgtctaagt acgcacggcc ggtacagtga aactgnnaat 60
ggctcattaa atcagttatg gttcctttgg tcgctcgctc ctctcctact tggataactg 120
tggtaattct agagctaata catgccgacg ggcgctgacc cccttcgcgg gggggatgcg 180
tgcatttatc agatcaaaac caacccggtc agcccctctc cggccccggc cggggggcgg 240
gcgccggcgg ctttggtgac tctagataac ctcgggccga tcgcacgccc cccgtggcgg 300
cgacgaccca ttcgaacgtc tgccctatca actttcgatg gtagtcgccg tgcctaccat 360
ggtgaccacg ggtgacgggg aatcagggtt cgattccgga gagggagcct gagaaacggc 420
taccacatcc aaggaaggca gcaggcgcgc aaattaccca ctcccgaccc ggggaggtag 480
tgacgaaaaa taacaataca ggactctttc gaggccctgt aattggaatg aagtccccct 540
ggagaagcaa atatggtatc acggagccat cancagaaga aaacgcccga gaacctgctt 600
gcgacttttg caanggaagt gtaagctacc ttgtcccgga acaagccaga ccaaccaagc 660
atgaactact cccttcttcc ttgaaggagc caaccaaggg gttttattgc ccantgaaaa 720
cttgggccca aaacccaaag aaaaaaaacn tttctngggt caaaaaaaan nccctttcgg 780
tttnnaaaag gggtccccgg gaaggtnatt tcccttant taccccccccc ccagaaaagg 840
ctttcccccc ntccaaaang gggggtggaa                                  870
```

<210> 15
<211> 610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 57, 340, 345, 351, 354, 356, 372, 375, 380, 382, 387, 392,
395, 406, 416, 418, 422, 426, 431, 465, 467, 471, 490, 499,

505, 506, 521, 532, 545, 557, 583, 589
<223> n = A,T,C or G

<400> 15
gggatattgg cccctcactg cagctgccag cacttggtca gtcactctca gcctttncac 60
tttgttcact gtcctgtgtc agagcactga cctccaccct tttctgagag ttattacagc 120
cagaaagtgt gggctgaaga tggttggttt catgttttttg tattatgtat cttttttgtat 180
ggtaaagact atattttgta cttaaccaga tatattttta ccccagatgg ggatattctt 240
tgtaaaaaat gaaaataaag ttttttttaat ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaan ggggnggccg ntcnanttta 360
aagggcccgt tnaancccgn tnatcancct cnacngggcc ttttanttgc cacccntntg 420
tngttngccc ntcccccggg ccttccttga ccctggaagg ggccncnccc nctgcctttc 480
ctaaaaaaan gaggaaatng catcnnattg tctgagtagg ngcattttat tntgggggggg 540
ggggnggggc aggacancaa gggggaggat tgggaaacaa tancaggcnt tctggggatg 600
ccggggggct 610

<210> 16
<211> 762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 645, 703, 718, 758
<223> n = A,T,C or G

<400> 16
ggtagtggct gcgggcgttt tggttgaatc ttttgctaca aaccatgttt gcgtttgagc 60
tctccaggat tttacatttt tgggtaacct cagtgattcc cattggtgta ggaaatgaga 120
ccctctctga agctgaggag agcacgttga tctgaacttt aaatcaatca gtgctgctgg 180
cacaatgaaa ggtggaactg cacttctgtt gagctctcag ttctgcggaa tttggtactc 240
attaccgtat tcgccgtact aagttggttt ctgttagtct taacagtctg ttttcttta 300
aaagcatgta gggcttcatt gccatgttct gtgggtgttt ggcaggttac cgatggggaa 360
gattcttgtc acagaatcag caataccata gttttttctac atgtgctcag ctggggggtgt 420
ggacaggtag gggtgggggaa agaagaggct ctgcgttctg ggggctttt cttctcctcc 480
ccctacccgg tttccctccc tgttttccta cctctacggc aagcccaaag tgtcttcccg 540
ggagcccagc gcagcccccg gctcttaccc aggaccccgc cccgtgctga gccttctgct 600
gaggtccttg cgtggagcac actcattcct ccaacccttg cgctnccgtt tctctctttc 660
tccgtcacgt tccaccgaat cactggctga ccgggtccat ggnaagcttc ccatcttnct 720
aaaaggctgc ctgcgcatct tgagcctgcg cttccggntt aa 762

<210> 17
<211> 1193
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 19, 20, 22, 50, 55, 495, 496, 521, 522, 529, 531, 535, 552,
567, 568, 573, 576, 592, 602, 606, 611, 617, 621, 623, 635,
636, 671, 687, 699, 704, 721, 722, 732, 761, 771, 775, 786,
812, 817, 823, 853, 873, 874, 882, 891, 892, 905, 908
<223> n = A,T,C or G

<221> misc_feature
<222> 912, 913, 914, 930, 933, 940, 944, 956, 962, 975, 978, 992,
993, 997, 1001, 1008, 1019, 1020, 1021, 1029, 1050, 1066,
1068, 1075, 1076, 1077, 1080, 1095, 1104, 1109, 1117, 1118,
1120, 1123, 1134, 1143, 1191, 1192
<223> n = A,T,C or G

<400> 17
```
gcccaacaca atggtgcgnn tncgggagaa attgcaggag gagatgcttn agatntagga 60
agccgaaaac accctgcaat ctttcagaca ggatgttgac aatgcgtctc tggcacgtct 120
tgaccttgaa cgcaaagtgg aatctttgca agaagagatt gccttttttga agaaactcca 180
cgaagaggaa atccaggagc tgcaggctca gattcaggaa cagcatgtcc aaatcgatgt 240
ggatgtttcc aagcctgacc tcacggctgc cctgcgtgac gtacgtcagc aatatgaaag 300
tgtggctgcc aagaacctgc aggaggcaga agaatggtac aaatccaagt ttgctgacct 360
ctctgaggct gccaaccgga acaatgacgc cctgcgccag gcaaagcagg agtccactga 420
gtaccggaga caggtgcagt ccctcacctg tgaagtggat gcccttaaag gaaccaatga 480
gtccctggaa ccccnnatgc gtgaaatggg aaaaaacttt nncggttgna ncttnttact 540
acccaaaaac tntttgggcc ccttgcnngg gtnagnattt caaatattga anggggggaa 600
tnggtnctcc ncctttntgg nanaacccaa aaccnncttc aaattttaaa aaaagggggcc 660
ccttggcctt ntggaaattg gccccentcc ccggaaaanc tttnttttta aaggggggcaa 720
nnaaaaacac cnaatttttt tttggctttt tttccaaaac nttttttctt ncctngaacc 780
cttggnggg aaaaccaaaa ctgggattcc cncccenttg ggnggaaacc cccccaaaaa 840
gggaactttt ttnttaaaac cgggggggaact tannaagggg cngggttttt nncaaaaatt 900
ttttnttncc gnnnacctttt taaaaaaaatn gcncccccn gggngggtttt tttttnccccc 960
cnaaaaaaaa aaanctntt ttttttaaaaa annttntnggg ncttttttntt ttttggggnn 1020
naaattttnt gaaaaaaaat tttttttttn cccccccccc cttttnanaa aaaannnccn 1080
tttttttaaa aaaangggg gttntttttng ggggggnnan canttttttt tttnccccccc 1140
ccnttttttt tttttaaaa aaaaaaaaaa aaaaaagggg gggggggggg nnc 1193
```

<210> 18
<211> 689
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 21, 54, 639, 649, 663
<223> n = A,T,C or G

<400> 18
```
gggagccata tgggtacctg nggaagctca tttcaggaag caaggggaca gccnttgcta 60
gagtcctgag gcatagcact aaggaggcaa gtgtggctgg agcacagtga gtaagtgggg 120
gagagctgca ggaagtgtgg ccagattgct aacagcggac atgccgtaaa gggtctcaca 180
gacattacga ggactttggc tcttacactg tgtgagatgg gaagtgtatt cattttcttg 240
ttgctgctat cataaattac cacaaatttc gtagcttaaa gcaatgtaga tttattctct 300
ttcagttctg gaggtcagaa gtccaaaaac gagtcttcta tggctaaaag caaggtgtct 360
gcagggccag ttccctctgg agacttcagg ggatgatcca gtccttgcac tttccagctt 420
tgagagccca ctggcactcc ttggctagta gctgcaccac tccaaactcg gcttctgata 480
tatctccttc tctgacttgg accctcctgt cttcctgttt taaagacact catgatgaca 540
ttgggtccac ctggataacc cagaataatc tctccatctc aagatcctta atcacatctg 600
ccatatcttt tttactgggt aaaagggaca tcatcttang gtcttgtgna ataaggatg 660
tgnaaaatat ttggggagaga gcatttttt 689
```

<210> 19

```
<211> 678
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 54, 56, 109, 114, 115, 116, 123, 126, 128, 133, 142, 143,
153, 155, 156, 163, 164, 173, 174, 176, 177, 179, 183, 186,
187, 193, 199, 200, 206, 207, 211, 213, 256, 261, 275, 281,
283, 290, 298, 351, 370, 378, 379, 381, 421, 429, 446
<223> n = A,T,C or G

<221> misc_feature
<222> 452, 459, 471, 493, 499, 500, 507, 517, 536, 538, 539, 540,
551, 555, 562, 564, 565, 566, 571, 577, 582, 587, 602, 603,
604, 622, 624, 628, 658, 669
<223> n = A,T,C or G

<400> 19
ggtcactctc tggatatgaa gagcggtccc ctgccgccag gcggttggga tgantntcat 60
ttggactcag cgggccggga aggggacaga gaagctcttc tgggggatnc cggnnntggc 120
aanttntnaa aanccccaa annttccggg ccnanntaac cannatttgc gtnnanntnt 180
ttnttnncgc ctncaggnn ttcccnnggg ntnggggggaa aaatccctca ttttgcaaag 240
caaaaatgtt agcttnccga ncaagctttt ttcangtttt ncnttttggn ccttcagnct 300
caaaatactt tgggccccgt tgggttgatg ccggctaccg ttaagaactt ngggcggcgc 360
aaaatttggn ttgtcccnnc ncagtttata ctaggaccct tctggaacta tttatcccc 420
ncgggggganc ctttgtttgg gaaaancccc gncaaaaana cccccggggg ntggttcctc 480
cccgcggggg gcnttttttnn tgggaanaaa ttggggnccc cccaaataaa aaattntnnn 540
ccaatgggat ngggnggggc cntnnnacct nccttttntcc cngggggnaaa aaaggggggg 600
gnnnaatgcc tttctaccaa ananaagngg ggggggggga cccaaaaagg gggggggntt 660
tttttttnt ggggggaa                                                678

<210> 20
<211> 695
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 20, 21, 56, 57, 633, 684, 694
<223> n = A,T,C or G

<400> 20
ggaaagctgg tcagaatctn naagatgggg aaggatctgg aagggctcac gggctnnatg 60
actgtttgct ctggtatccc tatagccttg aggaggccct cagaaccaca ggatggctgg 120
ggtggggctg gagtggcttg ctctccagtg ggagcttctt tggtaggaga acatggcttc 180
agtggatcca gagatgcctc gtcttccccc tcttcctctt cttccccttc ttcctccact 240
tctgatttct gcttacacag gtgatcaagg aaggccacac ggtgcagaag tggtagttcc 300
tgggaagtag ataaagatat tctcaggcat gaagcctttt cagatacaca aggtttgcta 360
tgaggcactc agtctgctcc atatccagag tggacagtta ctcacctaat cccacgtgtg 420
tggccagtca cctacacagc tcctcatcta gtgttaatgg tcattaccca gtcctcattt 480
ggagatcagt attccctcat tctacatcta gaatccatgg tcactcacct ggcttcaaat 540
ctaatgtcaa gtggttactc acccagcctc acatctaggg cttatagtca ctcacctggg 600
cccacattca taccaatgac ctcacattgt ggngcagcag tcattcatcc agctgtcagt 660
```

```
ccaggtcacc caccttggct tgcncctatt ccana                          695
```

```
<210> 21
<211> 760
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 75, 601, 606, 627, 653, 701, 739, 741
<223> n = A,T,C or G

<400> 21
tttttttttt ttttattttt aaaactatct tatatatttt cttttattga tacatatttt 60
acatatatat aaggnacaca tgagcatttc ttgcatgcat agaatgtgta atggtcaagt 120
cagcgtattt ggggtatcca tgatcttgag tatttaccac ttctatgtgt tggtaacatt 180
tcaagtcctc tcttccaact actttgaaat atgcaatata ttttttgctaa ctatagttca 240
ctctagtatg ctttctaaca tcagaactta ttcctttgat ctaaatggaa atttgtacat 300
attcaccaat ttctcttcat ttccccttct cagccccgga taacttattc tattccctat 360
ctccatgagg tgaagttttt cacctcccac atataagtga gaacatgtgg tatttgtctt 420
tctgtgcctg gcttatttca cttaccataa tgacctcaag ttccatccat gttgttagca 480
ataacatttt actctttttt atggccaaat agtattccac tgtgtacata aacattttct 540
ttatccctgt gccactgatg gatgcttagg ttaattccat atctttggta tcatgaatag 600
ngctgngata aatatgcaag tgcaagnatc tctttgatat actgattctt ttnctggggg 660
tatacctggg ttgctggaac atggggggggg tctatttttta nggttttgga gaaaactaca 720
tactggtttt ccccaggang ngggtctaaa ttataccttc                      760
```

```
<210> 22
<211> 832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 307, 335, 337, 343, 358, 467, 516, 573, 591, 599, 647, 692,
723, 741, 749, 751, 757, 761, 771, 800, 818
<223> n = A,T,C or G

<400> 22
catgataatg cacactggag atggacctca taaatgtaag atatgtggga aaagctttga 60
ttctcccagt tcatttcgaa gacatgaaag aattcacact ggggagagac cctataagtg 120
taaactatgt gggaaaggct tcaggtcttc cagttacatt caactacatg aaaggactca 180
cactggagag aaaccctatg gttgtcagca atgtgggaaa gcattatctg atctctcaag 240
ctttcgaaga cacatgataa cacatactgg aaatggacct cataaatgta agatatgtgg 300
gaaaggnttt gattatccca gttcagcgca aacangngag aantctcact ctggaganac 360
cctatgaatg caaggaatgt ggtaaagcct tcagtcattc aagttactta cgaatacccc 420
gaaagagttc atactggaga gaaacccgta taaatgtaaa ggaatgnggg aaaccatttc 480
attggtcccc ggaggccttt tcataaacct tgaaanggac ccaccagtat tgggagaaaa 540
cccctattaa gtgtaaaaga aatggggggg ggnaagcaat ttttcatttg naatcaagnt 600
tcccttttca ttaaaaccat ggaaatgggg accttcacct tagaagnaaa aaaccccctt 660
attgaagtgg gttggaaacc attggtggaa gnaaaaggcc ctttaaagta ccttttttcaa 720
gcnttttttt taccaaaatt ncccttttang naagacnttc nccaccttgg naaaaaaaaa 780
ggtttggttt ttggaaattn tttaaaaaaa atgggtancc ttaaaaaaac cc           832
```

```
<210> 23
<211> 728
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 20, 55, 559, 598, 651, 670, 707, 722
<223> n = A,T,C or G

<400> 23
ggtcagagcc actgaaaccn ttgcattctt tagcccttcg tgggcttctg atggnttcac 60
acagatgaag tgcttcattt ttatccctct ggcatccctg ctgcaccata agccctgtag 120
cacttgataa gatagatggg aatactgagc tcagagagcc cgcagtagca ggagagacag 180
ggatttgaca aatgagaatg catagaaaaa tgctgggact atgaggagct cgaggtgatg 240
gtgaggctta tgaaggtctg cagctgacac ctggtgtgga gtggaacttg gccagggtaa 300
agaaaggggg caggaaagat gtgccatgca gaggggagca ctgcctgtaa gggccaagat 360
ggaagggatc acagtaaatg caaaactcag aaaaatcggt tatgtttgtg atggaaggga 420
gcagaggttg gagctggcac tgccagtggg gactttagtc ctaaagcaaa gcaaaatgtt 480
cttctaaaac agtagggctc gatccctgag ttccagaaac tggtggcacc actggatttg 540
acctttagag atttaccang ctgcatgtgt ggtggatggt ggacagaaga tgggggcnag 600
gctggacaca ggctacccca gctattgcca tgccctcttg atgggggtgg ngcttggata 660
ggagtgatgn gatgtctgac tggggaaaga ctaccgtgt ggagtgngat ttgggaataa 720
antgcaga                                                      728

<210> 24
<211> 203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 20, 21, 56, 195, 197
<223> n = A,T,C or G

<400> 24
ggtctacaca gaagtgggcn ntgacatggt tctggtttaa ctaatatttg gctgtntgct 60
actaacagat tataataaat tgtcatcagt gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa agggnanccc cct                                       203

<210> 25
<211> 990
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 55, 531, 541, 585, 609, 625, 637, 652, 653, 691, 703, 727,
747, 748, 753, 754, 757, 760, 784, 791, 797, 806, 823, 836,
855, 870, 874, 902, 923, 927, 964, 967
<223> n = A,T,C or G

<400> 25
```

```
gacacaatgt tggcactctt ggttctggtg actgtggccc tggcatctgc tcatnatggt 60
ggtgagcact ttgaaggcga gaaggtgttc cgtgttaacg ttgaagatga aaatcacatt 120
aacataatcc gcgagttggc cagcacgacc cagattgact tctggaagcc agattctgtc 180
acacaaatca aacctcacag tacagttgac ttccgtgtta aagcagaaga tactgtcact 240
gtggagaatg ttctaaagca gaatgaacta caatacaagg tactgataag caacctgaga 300
aatgtggtgg aggctcagtt tgatagccgg gttcgtgcaa caggacacag ttatgagaag 360
tacaacaagt gggaaacgat agaggcttgg actcaacaag tcgccactga gaatccagcc 420
ctcatctctc gcagtgttat cggaaccaca tttgagggac gcgctattta cctcctgaag 480
gttggcaaag ctggacaaaa taagcctgcc attttcatgg actgtgggtt ncatgccaga 540
nagtgggatt tcttcttgca ttcttgccag tggtttttgta agaanaggct tgttcgtacc 600
ctatggacng tgagaatccc aagtngacag aaccttnttc gaccaaggtt annacttttt 660
attgtccctg ccctggggct tcaaataatt naatggggta canttttacc acccttggga 720
acccaanaaa gcccgatttt ttgggannaa aannaanttn ggtttccccc ccattacttg 780
ggantcttaa ncttgcnatt tgggcncaaa accccccaac canaaaaatt tttaangcct 840
gggttggggg ggggnaaaaa tgggaccctn tttnaaaccc cctggggatg gaaaaattta 900
cntgggggga cttgccccaa aantttngaa aagggggaacc aagggcctgg gttttttttt 960
tccncanaaa aatttttttt ttttaagggg 990
```

<210> 26
<211> 769
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 50, 572, 624, 625, 641, 648, 701, 705, 714, 764, 768
<223> n = A,T,C or G

<400> 26
```
ggtgccttga tgtccttgct tcttagcttc ccaaattccc tccggaactn actgatctcc 60
ttctaagctt tgccttggcc tgaactggtt ctggggaaaa acaaaaaaac aaaaaacaac 120
ttgtggagct gcttgttaat gagtttcata accaggcagc aagagccagc tccaagcctc 180
aagcccactg tctactccct gccctgc gg agcctctggc cagtctgctg cctcccaccc 240
ttcctccctg cctctcttca ccacagg ca gctgccgtgg aggacagaca atggagcagc 300
tgtcctgccc tggcaccctg cataccagct gtccactctt atctgcacac acactttctg 360
ggatattaag aggtggagct ttgtgcacag aattgggaag tgggggagga ggagggggaa 420
gacttctgac cctctcttag aagaaaaggg gatagggtgg ggggtggggg cttccgagag 480
cccttttgtc cttgagcccc tgtgttaaga agaatgctca tccccagggc tgagtcaaag 540
tcccaggcta ctaggcaggg gggcaagtcc tncacaacct gggaagaata actcagcttg 600
ggattgctga ctgaagccgg cganntgtgt cctggcccaa ngggcggnag cccttgtggg 660
aggacttggc gtggggcttg acctggtttt tcttttgttg naacnactgc ctgnctggat 720
gggaagaaca acatggattt ttggacaaac ccagggaatg caantaant 769
```

<210> 27
<211> 1182
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482,
483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494,
495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506,
507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517

```
<223> n = A,T,C or G

<221> misc_feature
<222> 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529,
530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541,
542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553,
554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564
<223> n = A,T,C or G

<221> misc_feature
<222> 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576,
577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588,
589, 590, 603, 605, 607, 609, 610, 637, 638, 639, 641, 645,
650, 652, 653, 654, 656, 669, 670, 671, 672, 674, 679
<223> n = A,T,C or G

<221> misc_feature
<222> 684, 691, 692, 699, 714, 720, 731, 733, 738, 741, 767, 774,
782, 783, 784, 796, 804, 809, 810, 811, 812, 813, 814, 816,
820, 821, 822, 832, 840, 841, 846, 847, 848, 864, 886, 888,
889, 890, 899, 900, 901, 912, 913, 917, 932, 933, 934
<223> n = A,T,C or G

<221> misc_feature
<222> 935, 936, 937, 939, 941, 942, 946, 948, 950, 956, 967, 984,
999, 1015, 1016, 1022, 1033, 1038, 1039, 1040, 1041, 1042,
1043, 1044, 1045, 1046, 1047, 1048, 1055, 1056, 1057, 1060,
1061, 1062, 1063, 1066, 1068, 1088, 1089, 1090, 1091
<223> n = A,T,C or G

<221> misc_feature
<222> 1094, 1096, 1100, 1109, 1110, 1115, 1117, 1121, 1122, 1123,
1125, 1126, 1127, 1128, 1174, 1177
<223> n = A,T,C or G

<400> 27
gcccaacaca atggggacag gctgcatcag aagaggccat caagcagatc actgttcttc 60
tgccatggcc ctgtggatgc gcctcctgcc cctgctggcg ctgctggccc tctggggacc 120
tgacccagcc gcagcctttg tgaaccaaca cctgtgcggc tcacacctgg tggaagctct 180
ctacctagtg tgcgggggaac gaggcttctt ctacacaccc aagacccgcc gggaggcaga 240
ggacctgcag gtggggcagg tggagctggg cggggggccct ggtgcaggca gcctgcagcc 300
cttggccctg gagggtccc tgcagaagcg tggcattgtg gaacaatgct gtaccagcat 360
ctgctccctc taccagctgg agaactactg caactagacg cagcccgcag gcagcccccc 420
acccgccgct cctgcaccga gagagatgga ataaagccct tgaaccagcc nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn gggggggggc 600
ccntntnann tttaaaaggg cccttttaaa accccnnna naaanccccn cnnngngggg 660
gccttttnn nngnccccnc cccncttttt nngtttttng cccccccccc cccnggggn 720
ttttttttt nanccccngg naaaaggggg ggcccccccc cccccnggg gggntttttt 780
tnnnaaaaaa aaaaangggg gggnaaaann nnnncncccn nnttttttttt tnaaaaaaan 840
ngggggnnntt tttttttttt tttngggggg ggggggggg ggggntcnnn aaaaaaaann 900
ngggggggggg anntttngaa aaaaaaaaa annnnnntnt nngggngngn ggggntttt 960
tttttttnggg gggaaaaaaa cccngggggg ttggggggnc ccccccttgg ggggnnaaaa 1020
anggggggggg ggnggttnnn nnnnnnnntt ttttnnnccn nnnccntntt ttttttttt 1080
```

```
tttttttnnn nggntncccn aaaaaaaann gggtntntgg nnnannnncc ccccccccccc 1140
caaaaaatgg gggggggggg gggccccccaa aaanttnttt tt                     1182


<210> 28
<211> 792
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 605, 638, 640, 706, 713, 724, 753, 759
<223> n = A,T,C or G

<400> 28
ggacagccca agaagtagga gcagacacag gaacaccgag ctggggctcc agtttctctt 60
attttaaaag gaatcagagg cagcagggga tcgttcagtg gttgtcaaaa cttgagtgtg 120
ggtcagcatc acctggaggg cttatcagaa tgcagcctgc tgggctcacc cccagagttt 180
tggatttttt ttgtgttaca ggtaagcccg agaatttgca tttctgacaa gatcccaggt 240
gaggctcact cgtgctgctg gctttgggat cacacttaac taccggtata gtggggaaag 300
acagggtttg gggtcacaga gggcagagct ggaattccag ctccctccag ctgtcagact 360
ttgggccagg cacttagttc ctctgagcct catctatgaa acgaaaacat ctgggtattt 420
cccccgcaag gggatgatga ggattgtatg agctcatgtg tgttagaagc tgctcgcagc 480
ctttgagtac acagcaagca ctcagtaagt gttaggaccc tttcttgcca aaaatgaagg 540
caccagaaaa cctggtgtaa aaaaattacc acagataaac ctgcaggaac aaaaatgccg 600
gccangtgcc tgtaatccta gcactttggg aagctgangn gggtggatca cctgaggcag 660
gagttcgaga ccagcctggc cacgtggtga aaccctgtct ctctanagaa tanccaggtg 720
tagngatgcc cctataatcc ggttctagga agntgagcng aaatacttga cctgaggtga 780
gtgactgatt cc                                                      792


<210> 29
<211> 693
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 226, 236, 243, 256, 257, 259, 268, 285, 300, 303, 324, 334,
415, 449, 452, 462, 469, 496, 509, 510, 512, 517, 529, 548,
565, 567, 573, 579, 597, 599, 619, 626, 628, 630, 662, 663
<223> n = A,T,C or G

<400> 29
cgcccttttt tttttttttt ttttttccct taagttacat ttaataacag tgacaatgac 60
caacattgag cagttgcctc gtgctccggt ctcagcactg gcttattaac atactcttac 120
cactcagaga gggacactga ggagaagaga aatggtaaac atcataagaa taaaatgaga 180
ggtaagaata aaatgagagt cagaagcaaa tgggaggaac tctgantcag gaattnggta 240
aanatcgggg gaaacnnant gacctganat aatggggggt tcatntttgg ggaactgtan 300
ganattcttg gcgcctggag acancagggc aaanaggaag gaagaacctg gatgccctag 360
cgaaccaagc tcccgcattc tatccccaca tccccctgga cgtgtttatt agggnccact 420
ggccaaatga caagctccaa agatcacgng anggggggggg tnccccggnc ttttggggcg 480
cccaaaacct tttttntgcc cttcttctnn gnaaaancccc ccaggaaant ttgcctttgc 540
tccccagnaa aacttgatat gatcntntgc gancccttgna aatgggggag tctcctntnt 600
tgtcttcctg gggcactcna aggagngnan aacgtcaaac cttggggaca tagggtttgc 660
annaatggtg atgaggggtc atcctgggag ggg                               693
```

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<210> 30
<211> 1080
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 20, 55, 240, 248, 345, 366, 442, 447, 449, 484, 508, 514,
522, 527, 542, 545, 559, 569, 571, 590, 640, 650, 667, 689,
690, 699, 703, 704, 708, 713, 714, 715, 732, 742, 745, 761,
791, 792, 793, 802, 809, 820, 831, 840, 841, 861, 872
<223> n = A,T,C or G

<221> misc_feature
<222> 873, 939, 975, 993, 1004, 1005, 1008, 1044, 1066
<223> n = A,T,C or G

<400> 30
gggagaagtt ttggctgtgn gtatcaaaaa gaggagttca taaaggtggt ggtanttaaa 60
ctaggcattg aatgatgagt agaatgttgg taactatagt caggggaagg gtattccagg 120
atggggggcct cttcaacatt acatcgctgt ctccagcccc accaacacca cttatgttgt 180
acagtatgcc ttggcaaatt tgactggcac agtggtcaac ctcacccgaa aacagtgccn 240
agaatccnaa gtaaaatccc aagtgaaaac aaagggatct ggtattgaag tacctcatgg 300
ggtcccaggg gcccctttg catttcttaa atgaaaacgg acccngactt cccccgggtg 360
gtggtnccgt ttcttactgg caccgattaa gcccaggggc cctttggtcc ttccctgccc 420
ttttggaaac ttgaaattca antgggnanc cttcttacct ggaaataact tcttacccat 480
gggnacctgg aaaaaacccc cctttggnaa aaanaaaatt tncccgnggc cccccgggga 540
anatnttttc tttcaattng gcccccggnc naaaaaaaaa accctttggn aaattttgga 600
atccaacccc ccttggaacc cagttggggg gccttttttcn gggcaatttn ccctccaatt 660
tttttntttt ccccccttta atttggggnn aacccctna aanngggnga ttnnnaattg 720
gcccccaaa anccttggaa anggncccccc tttttcaaa nttggggtcc cccccccggg 780
gaaaccccccc nnnaaaccct tngggggccnt aaccgggggn ggggggggga nccccccccn 840
nttttttttt ttttgcccaa nttttaaaaa annttcacct tttcttaaaa aaaaatttt 900
tttccccccct ggggcaccc accccccttt tttttttna ccttgggaaa cccccccctt 960
ggggccccgt ttttntaaaa aatgggggat ttncccctt aaannagngg ggggaccttt 1020
tccccaaaa aaaaaccgg gggnaaaaaa aaaaaaaaaa aggggntccc cttttttttcc 1080


<210> 31
<211> 1027
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 21, 53, 54, 88, 91, 94, 369, 467, 539, 579, 582, 598, 606,
623, 634, 644, 651, 668, 674, 684, 703, 718, 731, 744, 748,
756, 758, 788, 798, 803, 817, 818, 830, 850, 851, 853, 867,
883, 888, 889, 894, 903, 905, 906, 907, 909, 919, 922
<223> n = A,T,C or G

<221> misc_feature
<222> 927, 930, 931, 935, 936, 941, 942, 953, 956, 961, 962, 964,
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966, 991, 1007
<223> n = A,T,C or G

<400> 31
ggttgaacca tccttgcatt nctgggatga atcccatctg atcatggtga aanntttata 60
ctcacaatat tgggggccat caccacancc natntccaaa acttttttcat cacaccaaac 120
agaaactctg tacctaccaa gcaataactc ctcatactcc ctgaccccag ctcctagtat 180
cctctattct gctttctgtc tccatgaatt tgccttttct aggtatctta cataaataga 240
atcataaaat atttgtccct ttgtgtctgg tttctttttac ttagaaatgt tttcaggctt 300
catctatgtt gtcaaatata tcagaatttc attccttttt aaggctggga taatatccct 360
aacagtggng tgaggatctc agttctccat ttcctaccaa cagtggtttt tccttttaaa 420
aaattatcat agccatccta ggatctgtct aatttggcac ataaggngtt actgtggaaa 480
ggagcacggg actacgcaga agtccaagcc taatcactaa cagactaaca ggggggaggng 540
gacaatccgg gactctaagg gcctcaggtt cttttctcng gnaaggggg agctaaanaa 600
tggccngcct ggccaaacct ganataaggg gggnggggaa aaanaaaggg nggccaaata 660
aaaaaaanct aagnacccag accncctaga aaagggggg gangcttatt tatttttncc 720
ccagaaaagg ngaaaacctt aaangggngg ggcagnanaa ttggggccct ggttaaggca 780
cccccttnaa tatccccncc ccntgggaac caggggnngg ggccctcaan aggggccctc 840
caaaaacatn ngnggaaaga aaggaangaa cctttaacaa ccngggtnnt gggnaaaggg 900
aantnnnang ggaaaggggng gncccctntcn ngggnngggt nnaaggggga ccnganaaaa 960
nngngngggg aaaaatcccg ggccccgggg naaaacaaag gggaacnccc cccccccaa 1020
aaaaaag 1027

<210> 32
<211> 1193
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 55, 56, 603, 635, 658, 681, 699, 703, 725, 731, 739, 752,
759, 775, 810, 817, 827, 831, 834, 840, 883, 891, 894, 902,
906, 915, 924, 937, 945, 946, 954, 959, 967, 968, 970, 971,
974, 975, 976, 977, 985, 986, 987, 989, 997, 1005, 1013
<223> n = A,T,C or G

<221> misc_feature
<222> 1014, 1015, 1019, 1050, 1052, 1053, 1054, 1055, 1061, 1062,
1063, 1072, 1081, 1088, 1089, 1094, 1098, 1099, 1102, 1103,
1124, 1125, 1139, 1158, 1176
<223> n = A,T,C or G

<400> 32
ggttctttaa aagaggtaag agcaacgtgc tttgggagca gagaagaggg agaanncagc 60
atcttgcctg gatgagccag gggacacaga agagaagccc actatctcat ttaatctttta 120
caactctctt gcaaggttcc ctggttgtga aaatacatga gataaatcat gaaggccact 180
atcatcctcc ttctgcttgc acaagtttcc tgggctggac cgtttcaaca gagaggctta 240
tttgacttta tgctagaaga tgaggcttct gggataggcc cagaagttcc tgatgaccgc 300
gacttcgagc cctccctagg cccagtgtgc cccttccgct gtcaatgcca tcttcgagtg 360
gtccagtgtt ctgatttggg tctggacaaa gtgccaaagg atcttccccc tgacacaact 420
ctgctagacc tgcaaaacaa caaaataacc gaaatcaaag atggagactt taagaacctg 480
aagaaccttc acgcattgat tcttgtcaac aataaaatta gcaaagttag tcctggagca 540
tttacacctt tggtgaagtt ggaacgactt tatctgtcca agaatcagct gaaggaattg 600
ccngaaaaaa tgcccaaaac tcttcaagga gctgnggtgc cccatgagaa tgagatcncc 660

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caaagtgccg aaaaaggtac ntttcaatgg gacttgaanc ccnaagaatt ggtcattaaa 720
aactnggggc ncccaattnc ccctttaaaa anacttcang gaaattggaa aaatnggggg 780
cttttttcccc gggggaaatg gaaaaaaaan tttttttnctt aaaattnccc naanttgggn 840
tggataccccc caatatttcc cccccgcct ttttccttcc aangggggg nttnccccc 900
cntttnccct ttttncgggg gaanattaac ccctttnttt ttggnnggg gggncccna 960
aaaattnncn nccnnnnaaa atttnnntnt tgccccncct ttttnccccc ccnnnaaang 1020
ggggccgggg ggaaaaaaaa attttggggn cnnnnaaaaa nnngggggg antgggggaa 1080
ntttttttnna aaanaaanna anntttttt ttttttttt tttnnaaaaa aaaaaaggnt 1140
ttttttttt ttccccncc ccccccccc cccctnttt ttggggggg ggg         1193
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